IN THE CLAIMS

Please amend the claims as follows:

Please cancel claim 4 and 13.

1. (Currently Amended) A method of telemicroscopy comprising the steps of:

preparing a complete specimen on a microscopy slide, the complete specimen occupying an area of the microscopy slide;

placing the slide upon the stage of a microscope equipped with a high power objective lens, digital imaging apparatus and motorized stage;

imaging said area of the microscopy slide using the high power objective lens to obtain data for a composite high resolution image of the complete specimen in a single scan;

wherein the step of imaging comprises obtaining a continuous sequence of successive images by advancing the field of view of the high power objective lens of the microscope stepwise across the complete specimen and acquiring successive images of each field of view for the complete specimen;

digitally processing the high resolution image data to obtain data for a relatively low resolution copy of the composite image of the complete specimen; and

storing the high resolution image data and the low resolution copy of the image data in a datastore;

wherein the method further comprises the steps of

transferring the low resolution copy of the image data from the datastore to a terminal for displaying a corresponding low resolution image, as a navigation map, upon a monitor of the terminal; and

in response to a selection, by a user of the terminal, of an area of the navigation map, transferring corresponding high resolution image data for the selected area of the image from the datastore to the terminal.

2. (Previously Presented) The method according to claim 1, wherein the terminal

is a remote terminal.

3. (Previously Presented) The method according to claim 1, further comprising the step of recording the areas of the low resolution image that are selected, for review of performance of said user.

4. (Cancelled)

5. (Currently Amended) A telemicroscopy apparatus comprising

a microscope provided with a high power objective lens, a digital imaging apparatus and a motorized stage,

wherein the apparatus ~~can be controlled~~ is controllable to obtain, using the high power objective lens, digital image data at a desired high resolution in a single scan, of an entire specimen occupying an area of a microscopy slide placed upon the stage comprising a continuous sequence of successive images advancing the filed of view of the high power objective lens stepwise across the complete specimen thereby acquiring successive images of the field of view for the entire specimen;

image processing means to process the high resolution digital image data to obtain a low resolution copy of the image data;

storage means to store the high resolution image data and the low resolution copy of the image data thereby obtained; and

means for transferring high resolution and low resolution image data to a terminal in response to requests therefrom.

6. (Previously Presented) The apparatus according to claim 5, wherein the digital imaging apparatus is a digital camera.

7. (Previously Presented) The apparatus according to claim 5, comprising means for moving the objective lens of the microscope in order to provide automatic focusing.

8. (Previously Presented) The apparatus according to claim 5, comprising means for recording what image data is requested for review of the performance of a user.

9. (Previously Presented) The apparatus according to claim 8, wherein the recording means is a data storage disk, such as a floppy disk.

10. (Currently Amended) A method for acquiring image data for use in telemicroscopy, the method comprising the steps of:

placing a microscopy slide containing a prepared complete specimen upon a stage of a microscope equipped with a high power objective lens, digital imaging apparatus and motorized stage;

imaging the complete specimen using the high power objective lens to obtain high resolution digital image data of the complete specimen in a single scan; and

digitally processing the high resolution digital image data to obtain a relatively low resolution copy of the image data, wherein the step of imaging comprises:

obtaining a continuous sequence of successive images by advancing the field of view of the high power objective lens of the microscope stepwise across the complete specimen and acquiring successive images of each field of view for the complete specimen.

11. (Previously Presented) The method according to claim 10, further comprising: storing the high resolution image data and the low resolution copy of the image data in a datastore.

12. (Previously Presented) The method according to claim 10, wherein during the imaging, the method further comprises periodically refocusing the microscope by moving the objective lens relative to the microscopy slide.

13. (Cancelled)

14. (Currently Amended) The method according to claim 11 , further comprising processing the image data acquired for each image of each field of view, and storing the processed data in a datastore.

15. (Previously Presented) The method according to claim 14, wherein the processing comprises one or more of: digital image compression, and processing to remove peripheral shading around each image of each field of view.

16. (Previously Presented) A method of telemicroscopy comprising the steps of:

acquiring image data for a specimen using the method according to claim 10;

allowing access to the datastore from a terminal;

transferring the data for the low resolution copy of the image data to the terminal; and

displaying a corresponding low resolution image upon a monitor; and

in response to user selection, by means of the terminal, of an area of the low resolution image, transferring corresponding high resolution image data for that area from the datastore to the terminal.

17. (Previously Presented) The method according to claim 16, wherein the user selection is achieved by selecting an area of the low resolution image displayed on a monitor of the terminal.

18. (Previously Presented) The method according to claim 16, further comprising the step of recording the areas of the low resolution image that are selected, for review of performance of a person performing the method.

19. (Currently Amended) A telemicroscopy apparatus comprising:

a microscope provided with a high power objective lens,;

a digital imaging apparatus and a motorized stage~~,~~ for obtaining a continuous sequence of successive images by advancing the field of view of ~~wherein the apparatus can be controlled to obtain, using~~ the high power objective lens of the microscope stepwise across the complete ~~, digital image data, at a desired high resolution, of an entire~~ specimen thereby acquiring successive images of each filed of view for the complete specimen on a microscopy slide placed upon the stage in a single scan;

image processing means to process the high resolution digital image data to obtain a low resolution copy of the image data;

storage means to store the high resolution image data and the low resolution copy of the image data thereby obtained; and

means for transferring, in use, high resolution and low resolution image data to a terminal in response to requests therefrom.

20. (Previously Presented) The apparatus according to claim 19, wherein the digital imaging apparatus is a digital camera.

21. (Previously Presented) The apparatus according to claim 19, comprising means for moving the high power objective lens of the microscope in order to provide automatic focusing.

22. (Previously Presented) The apparatus according to claim 19, comprising means for recording what image data is requested for review of the performance of a user.

23. (Previously Presented) The apparatus according to claim 22, wherein the recording means is a data storage disk, such as a floppy disk.

24. (Previously Presented) A method for acquiring image data of a specimen for use in telemicroscopy, comprising the steps of:

imaging the specimen using a high power digital microscope for obtaining a continuous sequence of successive images by advancing the field of view of the high power digital microscope stepsiwe across the complete specimen and acquiring successive images of each field of view for the complete specimen to obtain a high resolution digital image data of the whole specimen in a single scan; and

digitally processing the high resolution digital image data to obtain a relatively low resolution copy of the image data.

25. (Currently Amended) A telemicroscopy apparatus for imaging a specimen comprising:

a high resolution digital microscope being controllable for obtaining a continuous sequence of successive images by advancing the field of view of the high resolution digital microscope stepwise across the complete specimen thereby acquiring successive images of each field of view for the complete specimen to obtain high power digital image data of the entire specimen in a single scan;

image processing means to process the high resolution digital image data to obtain a low resolution copy of the image data;

storage means to store the high resolution image data and the low resolution copy of the image data thereby obtained; and

means for transferring, in use, high resolution and low resolution image data to a terminal in response to requests therefrom.